

Input bit	Present encoder state	Next encoder state	State transition	Parity bit
0	000 (0)	000 (0)	0 ↔ 0	0
1	000 (0)	100 (4)	0 ↔ 4	1
0	001 (1)	100 (4)	1 ↔ 4	0
1	001 (1)	000 (0)	1 ↔ 0	1
0	010 (2)	101 (5)	2 ↔ 5	1
1	010 (2)	001 (1)	2 ↔ 1	0
0	011 (3)	001 (1)	3 ↔ 1	1
1	011 (3)	101 (5)	3 ↔ 5	0
0	100 (4)	010 (2)	4 ↔ 2	1
1	100 (4)	110 (6)	4 ↔ 6	0
0	101 (5)	110 (6)	5 ↔ 6	1
1	101 (5)	010 (2)	5 ↔ 2	0
0	110 (6)	111 (7)	6 ↔ 7	0
1	110 (6)	011 (3)	6 ↔ 3	1
0	111 (7)	011 (3)	7 ↔ 3	0
1	111 (7)	111 (7)	7 ↔ 7	1

FIG. 1C  
(PRIOR ART)

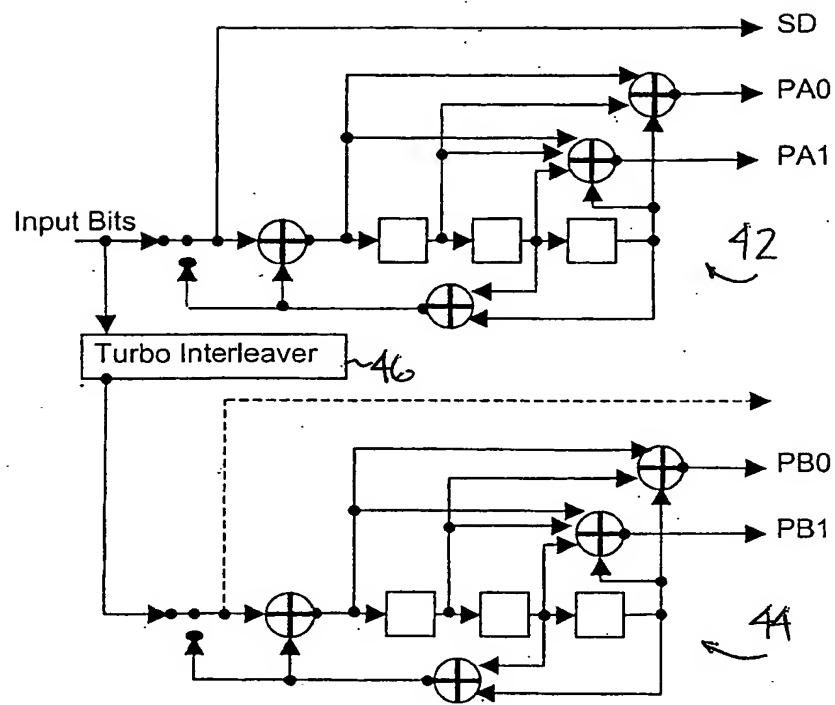


FIG. 2  
40  
(PRIOR ART)

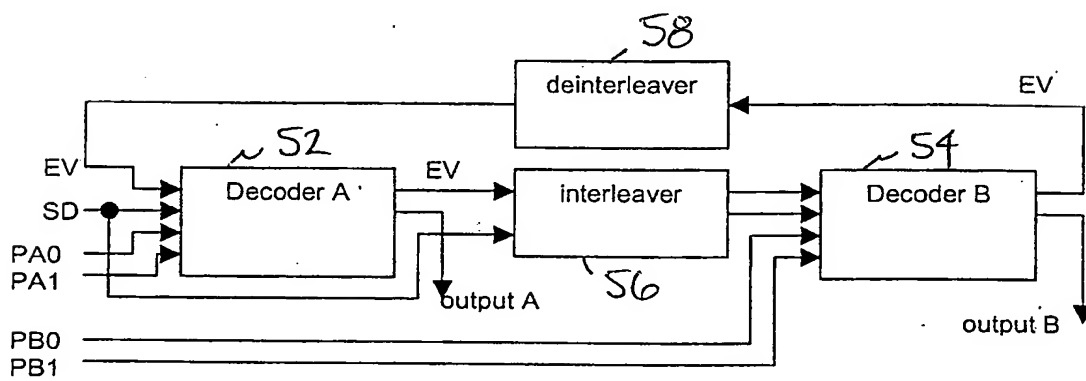


FIG. 3  
50  
(PRIOR ART)

